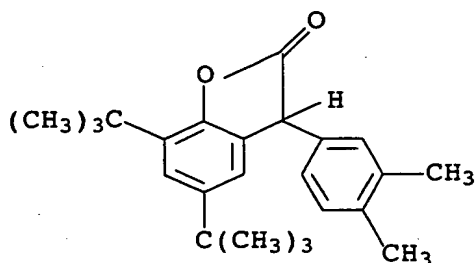


We claim:

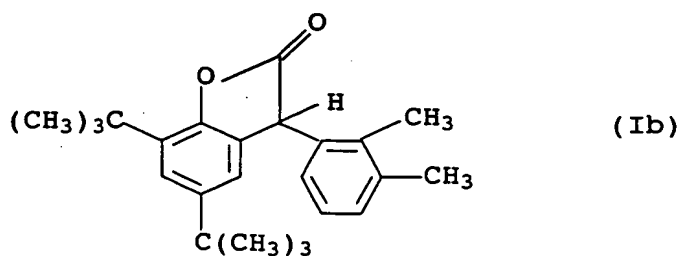
1. A thermoplastic molding composition comprising, where the total is 100% by weight,
  - a) at least one block copolymer A containing, in polymerized form, based on A,
    - a1) from 50 to 90% by weight of at least one styrene monomer, and
    - a2) from 10 to 50% by weight of at least one diene monomer,and, as stabilizers, based on the molding composition,
  - b) from 0.001 to 0.18% by weight of at least one benzofuranone derivative B,
  - c) from 0.05 to 1% by weight of at least one organic phosphite C, and
  - d) from 0.1 to 0.3% by weight of at least one stabilizer compound D selected from sterically hindered phenols and aromatic amines.
2. A molding composition as claimed in claim 1, where the block copolymer A is a styrene-butadiene block copolymer.
3. A molding composition as claimed in claim 1 or 2, where the block copolymer A has a star-shaped structure.
4. A molding composition as claimed in any of claims 1 to 3, where the benzofuranone derivative B is a compound of the formula Ia



(Ia)

or of the formula Ib

5

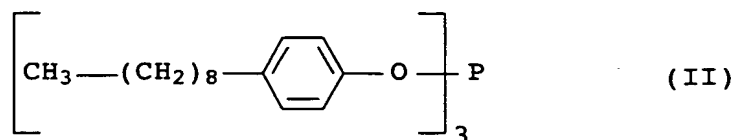


10

or a mixture of these.

5. A molding composition as claimed in any of claims 1 to 4,  
15 where the organic phosphite C is a compound of the formula

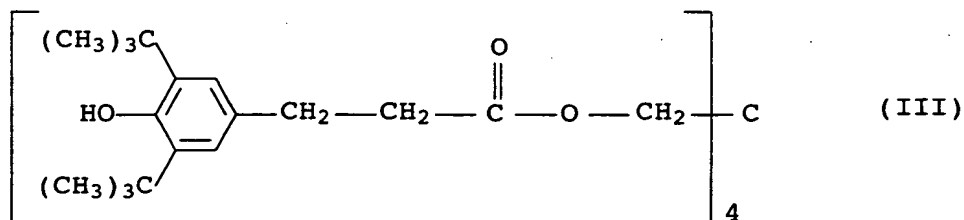
20



25

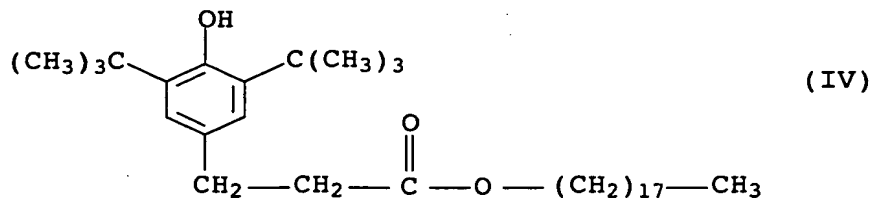
6. A molding composition as claimed in any of claims 1 to 5,  
where the stabilizer compound D is a sterically hindered  
phenol of the formula III

30



or of the formula IV

35



40

or a mixture of these.

45

## 33

7. A molding composition as claimed in any of claims 1 to 6, where the ratio of the amount of stabilizer compound D to that of benzofuranone derivative B is from 3:1 to 1:1 parts by weight.

5

8. A molding composition as claimed in any of claims 1 to 7, where the molding composition is neutral to slightly acidic.

9. A process for preparing the molding compositions as claimed in any of claims 1 to 8, where during the preparation the molding composition is rendered neutral to slightly acidic by adding CO<sub>2</sub> and water.

10

10. The use of the molding composition as claimed in any of claims 1 to 8 for producing moldings, foils, films, fibers, or foams.

15

11. A molding, a foil, a film, a fiber, or a foam made from the molding compositions as claimed in any of claims 1 to 8.

20

25

30

35

40

45

Stabilized block copolymers made from styrene monomer and diene monomer

## 5 Abstract

The invention relates to thermoplastic molding compositions comprising

- 10 a) at least one block copolymer A containing, in polymerized form, based on A,
- 15 a1) from 50 to 90% by weight of at least one styrene monomer, and
- a2) from 10 to 50% by weight of at least one diene monomer,
- and, as stabilizers, based on the molding composition,
- 20 b) from 0.001 to 0.18% by weight of at least one benzofuranone derivative B,
- c) from 0.05 to 1% by weight of at least one organic phosphite C, and
- 25 d) from 0.1 to 0.3% by weight of at least one stabilizer compound D selected from sterically hindered phenols and aromatic amines.

30

35

40

45